SOUTH GROUNDWATER CONTAMINATION PLUME: PART 1 - ALTERNATE WATER SUPPLY SYSTEM

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Department of Energy

FMPC Site Office P.O. Box 398705 Cincinnati, Ohio 45239-8705 (513) 738-6319

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MAR 1 1 1991 DOE-693-91

John D. Wood, Project Director Advanced Sciences, Inc. 11003 Hamilton-Cleves Road P. O. Box 475 Ross, OH 45061

Dear Mr. Wood:

SOUTH GROUNDWATER CONTAMINATION PLUME: PART 1 - ALTERNATE WATER SUPPLY SYSTEM

Reference: Letter, John D. Wood to Bobby Davis, "Scope of Work for Albright & Wilson Well Study", dated August 15, 1990

Enclosed is the proposed well field location for Delta Steel and Albright and Wilson Americas, Inc. (A&W), identified industrial users A and B, respectively, in the South Plume Engineering Evaluation/Cost Analysis (EE/CA). In lieu of a single 500 gpm well as was modeled in the EE/CA, four wells will be installed. Two wells will be installed for A&W and two wells for Delta Steel. The A&W wells will be operated either to supply 175 gpm from a single well or 250 gpm from the two wells (125 gpm per well). The capacity of the Delta Steel wells has not been determined because of potential future demands being considered.

Please provide the following design information for the proposed well field:

- 1. Can a maximum of 250 gpm be withdrawn from the Delta Steel wells in the future? If not, what would be the maximum?
- 2. It is our desire to install a single test well at the Albright & Wilson well location to confirm the capability of the total well field (i.e. of all four wells). What would the criteria be for the single test well to establish the pertinent engineering data for the aquifer needed to confer the success for all four wells?
- 3. What will be the drawdown and screen interval elevations for each well when the well field is in full operation? Consider also the groundwater elevation during a drought year (like 1988). Note that all portions of the screens must be below the drawdown level per EPA direction.
- 4. What will be the effect, if any, on the South Plume migration when the well field is in full operation?

Concurrent design efforts by A. M. Kinney, Inc. and property access/easement acquisition by the U.S. Army Corps of Engineers are in progress. Prompt response to the above questions will be most beneficial in confirming our present approach regarding these efforts.

Please provide your responses for the above questions by March 14, 1991. If there are any questions, please contact Carlos J. Fermaintt at 738-6157.

Sincerely,

Contracting Officer's

Representative

DP-84:Fermaintt

Enclosure: As stated

cc:

D. J. Carr, WMCO

D. J. Brettschneider, WMCO

A. Pfirrman, A.M. Kinney, Inc.

F. Markert, IT-Pittsburgh G. Gailott, IT-Pittsburgh

R. Smith, IT-Pittsburg

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ERA Project File

